Prairie Agricultural Machinery Institute

PAMI

Innovative Solutions
for Agriculture and Beyond

2011-12 Annual Report

Building Depth, Expanding Horizons

Year at a Glance

Ag Research

- 57 projects
- $2.7 million value
- $63 million economic impact*
- 520 jobs*

Areas of Work:

- Grain production/storage technologies
- Bioenergy strategies, systems, and equipment
- Livestock manure management
- Agro environment optimization
- Livestock traceability
- Cow/calf production technologies
- Forage & grazing technologies
- Ag production economics
- Ag safety

Ag Development

- 28 projects
- $0.6 million value
- $8 million economic impact*
- 22 jobs*

Areas of Work:

- Grain harvester research and development
- Agri electronics system development
- Grain storage technologies
- Haying equipment development
- Irrigation equipment testing and development
- Wind energy data acquisition
- Composting system development
- Research equipment development
- Fertilizer optimization

Ag Partnerships

- 60 activities
- Service on boards and committees
- Consultations
- Helping explore new opportunities in agriculture

Strategy

- Significant accomplishment of past strategic plan
- Updated strategic plan for future, six key objectives

Learning and Growth

- 10% growth in staff
- Significant investment in technical and safety training

WESTEST

- 23 projects, all areas
- Sales strategy under development

Information Services

- 35 activities and events
- Info video development
- Technical articles, summary research reports
- Conferences, seminars, producer events
- Website updates

* Economic estimates made by PAMI

PAMI

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Prairie Agricultural Machinery Institute

Annual Report 2011-12

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Letters of Submittal

Honourable Lyle Stewart
Minister of Agriculture
Government of Saskatchewan

Honourable Ron Kostyshyn
Minister of Agriculture, Food and Rural Initiatives
Government of Manitoba

PAMI

Humboldt, Saskatchewan
June 28, 2012

The Honourable Lyle Stewart
Minister of Agriculture,
Government of Saskatchewan

The Honourable Ron Kostyshyn
Minister of Agriculture, Food and Rural Initiatives,
Government of Manitoba

It is my honour to present the annual report of the Prairie Agricultural Machinery Institute for the year ended March 31, 2012.

Respectfully submitted,

Tim Oleksyn
Board of Directors Chair
Prairie Agricultural Machinery Institute

Saskatchewan
Ministry of
Agriculture

June 28, 2012

The Honourable Vaughn Schofield
Lieutenant Governor,
Province of Saskatchewan

Your Honour:

I have the honour to submit the annual report of the Prairie Agricultural Machinery Institute for the year ended March 31, 2012. It includes the financial statements audited by the Provincial Auditor.

Respectfully submitted,

Lyle Stewart
Minister of Agriculture
Government of Saskatchewan

Prairie Agricultural Machinery Institute

Board of Directors

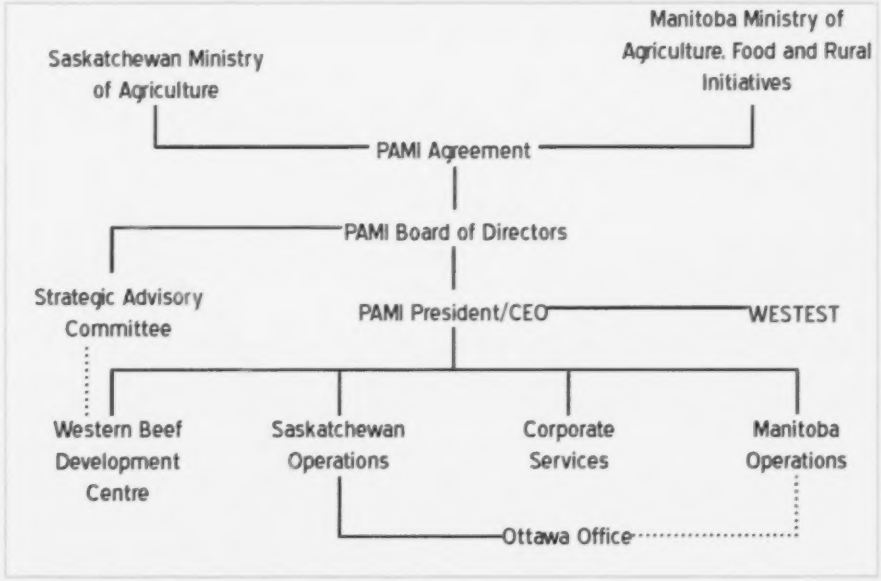
- Tim Oleksyn, Chair and Saskatchewan producer
- Bill Zettler, Vice-Chair and Manitoba producer
- Jerry Engel, Representative of Agricultural Manufacturers of Canada
- Dr. Tracy Gilson, Representative of Manitoba Agriculture, Food and Rural Initiatives
- Dr. Abdul Jalil, Representative of the Saskatchewan Ministry of Agriculture
- Bryan Hadland, Saskatchewan producer
- Boris Michaleski, Manitoba producer

Corporate Management Team

- David Gullacher, President/Chief Executive Officer
- Joanne Forer, Vice President, Finance and Administration
- James Wassermann, Vice President, Saskatchewan Operations
- Harvey Chorney, Vice President, Manitoba Operations
- Dr. Paul Jefferson, Vice President, Western Beef Development Centre

Mission: To enhance sustainability and profitability in agriculture and other sectors through research, innovation, adaptation, and knowledge transfer

PAMI
Innovative Solutions for Agriculture and Beyond



Chairman's Message

Tim Oleksyn

PAMI is an organization that is growing both in size and scope. Amidst these changes, the PAMI Board of Directors saw fit to request the addition of two new members to make our group more fluid and flexible, and broaden our expertise capacity. We welcome Boris Michaleski and Bryan Hadland. Both are producers from Manitoba and Saskatchewan, respectively. We also look forward to the contributions of Tracy Gilson, a representative of Manitoba Agriculture, Food and Rural Initiatives. She will continue the strategic thinking and wisdom offered to us for many years by the retiring Allan Preston. We will miss his involvement, but his expertise was such that we'll never lose contact with him. We look forward to crossing paths in the future.

Finding and retaining expertise in our growing economy is indeed one of the key challenges facing our two provinces. Our organization has always benefitted from our talented staff's ability to attract more top thinkers, and our experience has been that a great team is self-sustaining. However, because of the high level of expertise on which we rely, our board is emphasizing steps we can take to become an employer of choice. This means not only investing in the compensation of our employees, but supporting them in decision-making capacities. Our employees take on a high level of responsibility, and the challenges bestowed upon them by our industry partners and clients serve as a testament to their capability.

Demand for PAMI's services continues to grow in diversity and complexity. From a foundation in agriculture, we have translated our capability to serve many other industries, such as manufacturing, mechanics, and electronics, and our connectedness continues to expand. On a geographic level, our organization's expertise is reaching well beyond Saskatchewan and Manitoba to eastern Canada, the United States, and overseas.

I cannot give enough credit to the Corporate Management Team and employees of PAMI. They have been so responsive to the Board of Directors, but are also highly self-directed in serving industry needs. Because of their wisdom and intuition, PAMI is a vital organization that requires little guidance.

I commend the WBDC Strategic Advisory Committee and the WESTEST Board of Directors for their contributions to the strength of these two organizations.

In closing, I thank the Governments of Saskatchewan and Manitoba for their support of PAMI. We welcome the Honourable Lyle Stewart and the Honourable Ron Kostyshyn, and congratulate them on appointments as Minister of Agriculture in Saskatchewan and Manitoba, respectively. We know they will add value to our productive relationships. I thank Minister Stan Struthers for his support and wish him well in his new role as Minister of Finance. On a personal note, I offer my sincere thanks to Bob Bjornerud for his long-standing commitment to PAMI. Over the years of his service as Minister, Bob has become a friend. The opportunity he has given me to chair this organization is an honour that I undertake with pride and pleasure.

President's Message

David Gullacher

From a strategic and operational standpoint, PAMI had a strong year in 2011-12, reporting both positive income and progress on strategic objectives.

With roots in agriculture, but with an expanding focus, PAMI carried out $2.7 million in agriculture research, development, and demonstration work – an all-time record for the organization. This work will provide important technologies for agriculture and will be crucial to the industry in the face of environmental and other challenges, such as nutrient loading in Lake Winnipeg.

We are seeing a substantial upswing in machinery development work with the major agricultural manufacturers. This work is highly confidential, taking PAMI staff from both Saskatchewan and Manitoba far and wide across North America, as we help develop universal machines that function well globally. We look to build on these relationships for the future, knowing that we are crafting the best machines possible for our prairie region.

Intra-organizational collaboration has been an important theme for PAMI this year. Collaborating on projects like the provincial farm machinery custom and rental rates guides, mobile biomass densification, and the Small-Medium Enterprise consulting activity sponsored by the Industrial Research Assistance Program, our Saskatchewan and Manitoba Operations are finding internal efficiencies and creating a compounding base of knowledge from which our clients benefit.

The Western Beef Development Centre has continued to build a base of demonstration projects under the Governments of Canada and Saskatchewan's Agricultural Demonstration of Practices and Technologies (ADOPT) program and other funds from industry. The Centre also secured out-of-province funding — a testament to the organization's credibility in the broader region. Tech-transfer initiatives such as field days, producer meetings and conferences, newsletters, and its YouTube presence are growing in popularity.

Amidst growth in PAMI's opportunities, we recognize the need to invest in our people. With our key performance indicators in view, we have offered training in technical report writing, computer engineering, safety, management accounting, and overall capacity building to help reach organizational goals.

It is, indeed, our employees who have built the foundation for our positive bottom line, collaboration between operations, and the organization's growth. I thank them for their contributions to PAMI in **Building Depth, Expanding Horizons**.

Strategic Direction

Vision

Innovative solutions for agriculture and beyond

Mission

To enhance sustainability and profitability in agriculture and other sectors through research, innovation, adaptation, and knowledge transfer

Objectives

- Enhance PAMI's profile to rebrand the organization as an agency with broader impact and potential
- Increase public visibility and communications to facilitate project opportunities and foster third-party learning
- Pursue initiatives that evaluate the economics of new technologies, explore renewable energy solutions and bioresources, discover environmental technologies, reinforce organizational knowledge of agricultural machinery, and cultivate technology innovation
- Continue to enhance financial stability and growth
- Adopt a human resources strategy that positions our organization as a leader in the local community and an employer of choice
- Develop our capital base to facilitate growth

Crop Technology Development

PAMI's mission is to provide farmers with innovative strategies for planning and achieving profitable farming operations. We strive to support value-added initiatives for developing sustainable crop production practices. We provide innovative equipment design and testing and offer full-service support to both the farming community and the agribusiness sector. Our objective is to always work towards the most efficient and cost-effective solutions for each client.

Farms in Saskatchewan and Manitoba have roughly $14 billion invested in farm machinery and equipment. That is about $210 in machinery per acre of crop land.

http://pami.ca/wp-content/uploads/2012/06/Report_A3909_canola_storage.pdf

Winter Wheat Research

A primary interest of Ducks Unlimited is to preserve and create habitat for waterfowl. Winter wheat is a favourable crop for birds because they are in search of food in the spring, and their habitats can become destroyed when crop land requires spring seeding.

PAMI has been working with Ducks Unlimited on a winter wheat trial to determine optimized fertilization and weed control practices. PAMI's role is to manage the test plots near Humboldt. Seeding took place in fall 2011.

Combine Harvesting

PAMI's Harvesting Technologies team has more than 150 years combined experience in evaluating, testing, and developing harvesting equipment for the prairie provinces. PAMI has advanced beyond this and also develops for clients the equipment and instrumentation needed for them to do harvester research and development. PAMI, again in 2011, provided manufacturers and farmers with harvesting expertise for prairie crops such as cereals, oil seeds, pulses, corn, soybeans, edible beans, canary seed, hay, and forage. The advances made in harvester design in the past three decades have increased farm revenues in Saskatchewan and Manitoba by an estimated $150 million annually through reductions of grain loss alone. At the same time, harvester capacity has been increased to four times the capacities of harvesters from that time period.

http://pami.ca/2012/06/combine-performance-seminar-2012/

Farm Machinery Custom and Rental Rate Guide

Machinery rentals and custom work account for rougly $450 million of annual farm operating costs in Saskatchewan and Manitoba, and the Farm Machinery Custom and Rental Rate Guide published by the provinces is an important information source in this area. As a joint initiative between the Saskatchewan Ministry of Agriculture and Manitoba Agriculture, Food and Rural Initiatives, PAMI updated the guide in each province. There will be a print and downloadable, interactive version. The publication informs producers on what they can expect for base, repair, and maintenance costs over the life of a machine, and helps them make business decisions about their farming operation. The publication will be completed in spring 2012, and will be released by the two provincial governmental bodies.

Post-harvest Crop Conditioning and Storage

Saskatchewan and Manitoba produce in excess of 30 million tonnes of grains and oilseeds annually, and a significant portion of these crops must be conditioned and stored on-farm for at least a few months. PAMI wrapped up some important multi-year projects in this area during the year. In particular, they explored new ways to monitor and control grain moisture in bins, using natural air-drying technologies. They also tested new high oil-content canola seeds in the compressive environments typical of tall storage bins.

PAMI had some success over previous years in determining grain moisture in bins, and this year had good success in controlling the drying activity based on information about the stored grain and the outside air. In full-scale drying trials, researchers were able to successfully dry grain while using only 43 percent of the electrical energy compared to full-time fan operation.

PAMI used compression tests to simulate deep storage of high oil-content canola. Bin depths to 30.5 meters were simulated with no oil exudation or other adverse effects determined. This is good news as producers adopt the new high oil-content strains of canola seed.

Bioenergy and Products

PAMI is a North American leader in researching alternative uses for agricultural products, byproducts, and biomass as environmentally-friendly energy resources and alternatives to petroleum and coal-based products. This applied research examines the most effective forms and technologies for processing biological materials for efficient energy extraction.

In 2007, PAMI established its Applied Bioenergy Centre (ABC) with a mission to play a key role in developing and using bioenergy sources from Canadian agricultural products.

In tandem with researching biological materials, PAMI explores and researches existing and potentially new mechanical technologies to determine the most effective equipment modifications and new designs to harvest, process, and efficiently extract energy resources.

Solid State Anaerobic Digestion

Converting biomass into energy is a significant opportunity in the field of agriculture. Anaerobic digestion is an area of research growth across Canada. While other provinces are exploring the potential to convert liquid biomass into energy, solid state anaerobic digestion (using solid manure and wet distiller's grains) is a new field of study that is being led in Saskatchewan at PAMI's ABC.

PAMI staff ran seven trials using its digester over the summer of 2011. Significant amounts of gases were produced, but researches struggled to collect the gas because the containment system was difficult to seal. Since then, staff have redesigned the system and have abandoned the containment bags altogether and replaced them with a steel tub system with a resealable lid. More trials are scheduled for 2012.

http://pami.ca/2012/06/solid-state-anaerobic-digester-faqs/

New this year, PAMI initiated a bench-scale solid state digester. Researchers designed, built, and verified the functionality of the system that mimics as closely as possible the larger digester at the pilot facility. The smaller version performs the same functions, such as liquid recirculation, pressure maintenance, gas collection, and mesophilic temperature maintenance. The trials using this system are being conducted in collaboration with the University of Saskatchewan with a goal of maximizing biogas production. The resulting treatment system that proves most favourable will be applied to the larger system at the pilot facility.

Biomass Logistics Study

Over the past year, PAMI researchers studied the costs of collecting, processing, and transporting energy crops and agricultural residues to a biorefinery to examine the potential of such biofuels replacing traditional energy sources. The study also included a significant chapter on how to grow energy crops that includes agronomic information such as seeding rates and depth.

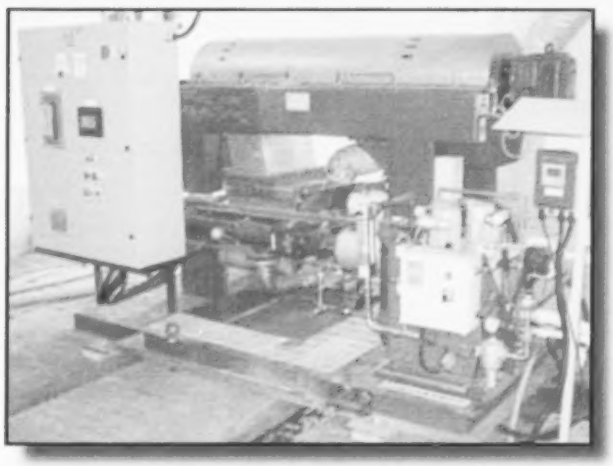
http://pami.ca/2012/06/research-report-logistics-of-agricultural-biomass-feedstock-for-saskatchewan-pdf/

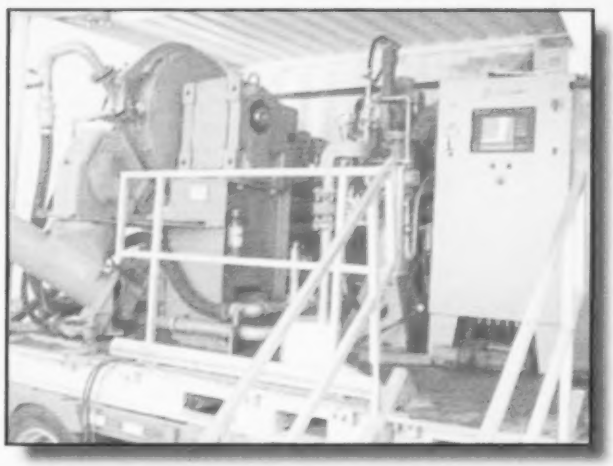
Manure Research

Treatment

Manitoba is facing new legislation in 2013 surrounding manure waste and phosphorus treatment due partly to concerns about nutrient-loading in Lake Winnipeg. Following a literature review that was completed in June 2010 in order to recommend the most effective technologies to combat the phosphorus overloading, PAMI began evaluating treatments that would help hog producers comply with the legislation. The two treatment systems on which PAMI focused were a centrifuge and a rotary press. Staff installed and operated the systems at a commercial barn where they evaluated its effectiveness, economics, and overall suitability for placement on Manitoba farms. In addition, manure underwent an analysis before and after the treatment to study the effects on nutrient composition.

The project was funded by the Manitoba Livestock Manure Management Initiative. The resulting report will be released in spring 2012.





Application

During the mid-2000s, PAMI's Saskatchewan Operations developed a prototype for a solid-manure applicator with the University of Saskatchewan. Today, PAMI has shifted its focus to the environmental benefits of uniformity of application. The first year of application and monitoring took place in 2011, with data collection conducted by University of Saskatchewan Soil Science researchers. The second year of research will begin in spring 2012.

Should the uniformity of manure application prove to be important to gaining environmental benefits, the research will be useful, especially in Manitoba's hog industry, because once liquid has been removed from manure, the phosphorous-rich solids can be transported away and applied to less sensitive areas.

Traditional manure spreaders typically have a coefficient of variation of up to 140 percent. The solid-manure applicator developed by PAMI can reduce the variation down to 10-12 percent.

Mobile Densification

Bulk is an obstacle facing the viability of solid biomass as an energy source. Through pelleting and cubing, researchers at PAMI's Manitoba Operations are trying to increase the energy-to-volume ratio, thereby reducing transportation costs from the field to the factory. Agricultural biomass is an ideal source because of its low moisture content, potential for lower processing requirements, producer expertise in collection and storage, and CO_2 neutrality.

Harvesting Willow from Pastureland

Working with Agriculture and Agri-Food Canada's (AAFC) Agroforestry Branch in Indian Head, Saskatchewan, PAMI's Manitoba Operations took on a project to rehabilitate pastureland by using a specially-designed baler to harvest willow trees. Willow biomass is a potential source of energy, but it needs to be dried and transported economically. PAMI used its mobile densification system to convert the products to solid fuel, which serves as a coal replacement. The resulting report was completed in March 2012.

Energy Crops

Ontario grows dedicated energy crops. Manitoba Operations of PAMI was contracted by the Ontario Federation of Agriculture to explore methods to make the products more compact and easier to transport, and convert the shape into something suitable for coal-burning boilers. Research began in 2011 and will continue throughout this next year.

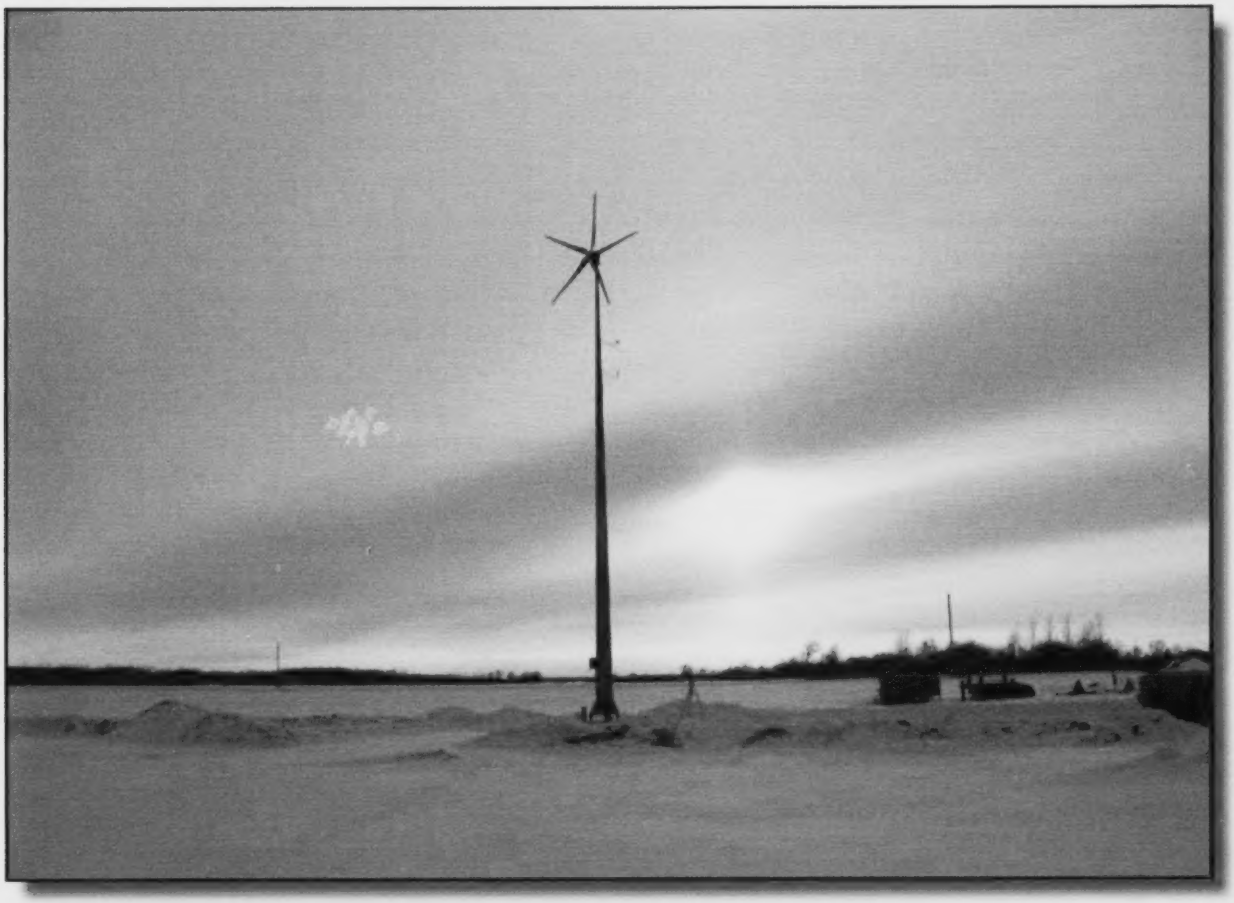
Cubing Energy Requirements

To gain an understanding of the energy requirements to produce cubes of wheat and barley straw, Saskatchewan Operations borrowed the mobile densification unit developed by Manitoba Operations. The project was conducted to help determine the feasibility of biomass as an energy source. More work needs to be completed on energy assessments of full-scale processing equipment in order to develop the science, as most research to date has been conducted in lab trials.

The study further explored densification and how it affects transportation costs, adds value to the biomass, and other factors.

Wind Energy

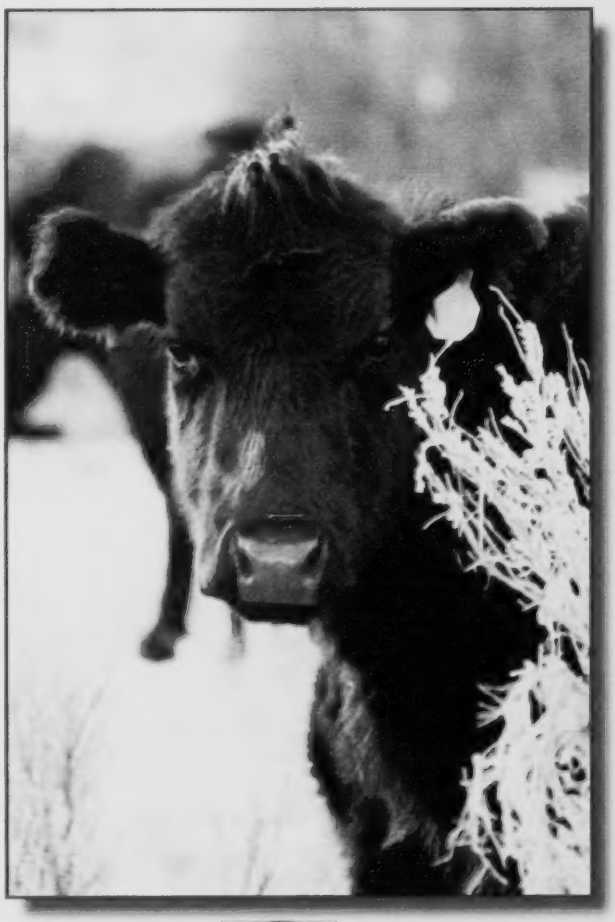
Over the past few years, PAMI has assisted in wind energy research across Manitoba. PAMI's role has been in the placement and operation of meteorological towers to measure the viability and economic benefit of erecting windmills for energy production at particular sites. PAMI continues to provide monitoring and maintenance of these towers. In addition, staff installed wind turbines at Arborg and Melita.



Western Beef Development Centre

www.wbdc.sk.ca

PAMI's livestock research division – Western Beef Development Centre (WBDC) - has a mandate to maximize the profitability and sustainability of the cow-calf sector of the beef industry. WBDC uses a team of scientists, research associates, and ranch managers to conduct research development and demonstration on applicable management strategies to help cow-calf and backgrounder operations increase their competitiveness in today's marketplace. WBDC offers a wide-ranging set of skills and facilities for use in third-party client research.



With the expansive land base and facilities of Termuende Ranch, used in partnership with the University of Saskatchewan, and with a 300-head cowherd, WBDC has become recognized around the world for its relevancy, research capacity, and ability to communicate research results to the end user. WBDC serves as an intermediary to communicate between the research community and the cattle industry.

The Centre is operating at full stride, and in 2011-12, tied its record of 20 projects. The Centre is seeing increases in private and third-party driven projects, and research demands from across the prairie region.

WesternBeef
DEVELOPMENT CENTRE

Strategic Advisory Committee

Cattle Producers
Tim Oleksyn (Chair)
Rick Toney (Vice Chair)
Dennis Edwards
Brent Griffin
Dave Kerr
Murray McGillivray
Duane Thompson

Researchers
Dr. Steve Hendrick
Dr. John McKinnon

Governmental Representatives
Tracy Evans
Brant Kirychuk
Juanita Kopp
Grant Zalinko

Corn Grazing

Over a decade ago, WBDC conducted research to evaluate corn varieties for grazing as a standing whole-plant crop in the field for mature beef cows. The challenge at the time was achieving the necessary corn heat units in Saskatchewan's growing conditions to produce adequate energy and protein. The varieties did not perform well enough to be considered viable. Since WBDC's initial research, companies have developed significantly lower heat unit corn varieties that are Roundup Ready. Moreover, corn is a high-yield crop with more biomass compared to annual cereals.

WBDC evaluated five new corn varieties in 2011. Quality tests on the whole plant, leaves, and grain/cob in terms of protein and energy content showed that all five varieties exceeded a cow's nutritional requirements. The cost per cow per day ranged from $0.70 to $1.40, which is very competitive with swath and bale grazing systems.

> "We often have conversations with our clients about improving their business and making it more profitable. WBDC fact sheets are a good way to stimulate that discussion."
>
> David Ablass, MNP (Moosomin Office)

From this 2011 pilot study stems three other projects. One will compare three corn varieties from three different companies against forage barley at four sites in the parkland of Saskatchewan and Alberta. The second will compare corn grazing with barley swath grazing and dry lot barley feeding, examining the effects on the cow, its reproductive efficiency, and economics. The final study will be a fall backgrounding study on weaned calves using the same feeding systems.

Establishing Persistent Sainfoin Among Alfalfa

Sainfoin is a bloat-safe legume. When seeded with alfalfa, the bloat-safe properties of sainfoin transfer to the alfalfa as well. However, sainfoin is not as persistent a plant as alfalfa – it gets selectively grazed, it is not as competitive, and it tends not to last.

Working with an AAFC plant breeder, WBDC seeded five new experimental lines of sainfoin at Termuende Ranch in 2011 as monocultures and mixtures with alfalfa. With a small plot trial, establishment in the seedling year showed promise. Research will continue into 2012 to determine if one of the varieties emerges with superior persistence that would warrant registration as a commercial variety.

Commercially-Available Zero-Till Openers

Seeding legumes is an economical method for pasture rejuvenation with its advantage of forage quality relating to protein content and nitrogen management. Furthermore, benefitting from inexpensive glyphosate prices and the availability and the variety of openers on zero-till drills, there is significant opportunity for effective pasture rejuvenation.

In 2011, WBDC tested six different zero-till openers on the PAMI plot drill. After applying glyphosate to control crested wheat grass (the control plots were not sprayed), the openers were used to sod-seed alfalfa. The seedling counts and biomass of the plants were measured. Despite the variety of configurations among the openers, all were quite effective and produced good yields.

With an indication that sod seeding with commercially-available openers is a promising approach to planting legumes for pasture rejuvenation, WBDC is looking to extend the study to multiple sites over multiple years.

www.wbdc.sk.ca/producer_events.htm#field_days

Cost of Production

Cost of production surveys are conducted on an annual basis by WBDC's beef economist. By working with producers through on-farm visits, data is collected to form an aggregate from which benchmarks are derived. The analyzed data is released through published fact sheets. WBDC's cost of production studies play an important role in informing governmental policy, providing industry direction, and encouraging producers to improve their efficiency. At the same time, we are exploring processes and software to make cost of production data more readily captured and used directly by ranchers.

The 2010 study, which was released in the past fiscal year, revealed that the average cost per cow was $615 with an average herd size of 282 cows. The average break-even price for weaned 2010-born calves was $1.29/lb (542 lb average weaning weight).

www.wbdc.sk.ca/pdfs/fact_sheets/2011/2010%20COP%20Fact%20Sheet_WBDC_Larson.pdf

RFID Tags

Radio Frequency Identification (RFID) tags became mandated by the Canadian Food Inspection Agency in 2002 to help track the movement of cattle. Through the ability to pinpoint the outbreak of disease, the beef industry will be enhanced and protected with the knowledge of which animals are at risk.

In response to producers' complaints of RFID tags' poor retention rate, PAMI is involved in research on RFID tags on two fronts. Last year, WBDC began examining how farm management practices impact the retention of RFID tags. In spring 2012, Saskatchewan Operations will begin looking for ways to improve the technology.

Outreach

WBDC reaches out to producers to help improve the profitability of their operations. Staff produce fact sheets (www.wbdc.sk.ca/pubs_fact_sheets.htm#2011_production) and scientific papers, organize events, and commit to speaking engagements. The Centre publishes a quarterly electronic newsletter and posts YouTube videos summarizing research results. One can subscribe to the WBDC's YouTube channel at youtube.com/user/WSTRNBEEF or view them at the WBDC website, www.wbdc.sk.ca/research_videos.htm.

WBDC continues to gain international recognition. Its research has been cited in academic publications worldwide. Most recently, WBDC research has been requested and recognized in the United States, specifically in Montana, North Dakota, South Dakota, and Nebraska. Other countries referencing and requesting WBDC research include Sweden, Finland, Australia, China, and Mongolia. The Centre also receives visits from international scholars to capture knowledge and share global know-how.

Industry

PAMI's services to industrial equipment manufacturers evolved from its in-depth and diverse design and engineering knowledge and experience with agricultural equipment. PAMI recognized that its expertise and approach was directly transferrable to, and in demand by, other equipment manufacturing sectors including:

- Vehicles and transportation
- Defence and security
- Mining and forestry

PAMI understands that optimum design is derived from a strategy combining design with physical testing to advance the process quickly, but carefully, from concept to roll-out. PAMI has the physical test equipment, protocols, and know-how to accurately predict field performance to reduce design, production, downtime, and warranty costs, and can collaborate effectively in the design/development function.

PAMI's divisions in both Saskatchewan and Manitoba conduct a variety of projects for private clients. The project outcomes are confidential in nature, but aim toward product improvement, validation, and verification. In the past year, PAMI helped a company develop a superior lubricant for diesel engines and conducted third-party evaluation of commercial manure-treatment systems. The organization also increased its presence in the mining industry by conducting vehicle modifications and testing portable bathrooms.

Vehicle Testing

PAMI has leveraged its ISO 17025 accreditation for vehicle-testing purposes, and has earned distinction as a National Laboratory. From seatbelt testing to destructive pulls, PAMI conducts extensive testing on the safety systems of ambulances.

CSA Technical Committee on Agricultural Machinery

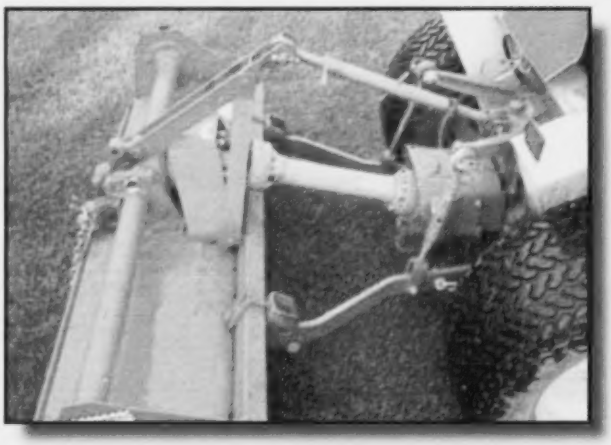
Jim Wassermann, Vice President of PAMI's Saskatchewan Operations, is the Vice Chair of the Canadian Standards Association (CSA) Technical Committee on Agricultural Machinery. The committee, which consists of manufacturers, researchers, regulators, and producers, maintains approximately 48 CSA standards that allow designers and engineers to develop new machines that meet national standards and international guidelines.

In the past, PAMI completed important work toward a Canadian standard for portable augers. The standard has been published. Today's emerging issues, as identified by the CSA Technical Committee, include:

- high-speed tractors and compatibility with agricultural machinery and implements
- LED lighting integration
- safety symbols and their universal recognition

Safe Implement Hitching Guide

The CSA Agricultural Machinery Committee noted concerns from farmers across Canada about lack of knowledge of the proper procedures and equipment for hitching implements to tractors. Today's tractors are faster, but implements are not necessarily designed to handle the speed. Furthermore, implement manuals become lost as the equipment ages. In response, the committee asked PAMI to develop a guide to address the safety issues associated with implement hitching.



The Safe Implement Hitching Guide was developed with assistance from members of the CSA Technical Committee on Agricultural Machinery, and was published in 2011. It is distributed across North America by PAMI, the Association of Equipment Manufacturers, and the Canadian Agricultural Safety Association. The project was considered to be a resounding success. A French version is now available.

Auger Intake Guards

Auger intake guards must serve the dual purpose of allowing material to flow, while protecting human users from injury. Although intake guards accommodate most situations, there is still a tendency for producers to remove the guards and not replace them, thereby exposing the operator to risk.

The Workers' Safety and Security Commission of Quebec turned to PAMI to evaluate innovative designs. After exploring two options in 2010-11, PAMI tested two new guards that go on the hopper, not the auger. One design was provided from Quebec while the other was developed by PAMI. Both meet CSA requirements and may be options for the safety of future augers.

Rollover Protective Structures (ROPS)

PAMI is one of the most active, independent ROPS design and testing facilities in North America, and maintains membership on the Canadian Standards Association ROPS committee. PAMI has built on its reputation as a lead innovator in finding a solution to make ROPS for older tractors more affordable. Today, staff engage in regular projects for industry, particularly unique machines in the oil and gas, mining, and forestry industries.

National Defence and Public Protection

Through its Memorandums of Understanding with the Department of National Defence (DND) and the Royal Canadian Mounted Police (RCMP), PAMI continues to protect military and police personnel by evaluating new equipment they are looking to purchase, solving mechanical problems, and reducing maintenance costs.

One important project was the Proof of Concept shelter designed for the Canadian Forces, using a shipping container that PAMI designed, built, and modified. Most will have a power generating plant and heating ventilation air conditioning (HVAC) system and will provide stand-alone capability for crucial support services such as medical, dental, workshops, and command posts. Having integral power generation capability and an HVAC system will provide flexibility in transporting such resources by land, air, and sea. Most shelters will be mounted on the back of trucks being acquired by the Medium Support Vehicle System (MSVS) Project.

"This report is outstanding, and could revolutionize the way recovery is done in DND in the future."

Maj. Brian Mills
Canadian Forces

Small and Medium Enterprises (SME) Marketing Initiative

Through funding by the National Research Council Industrial Research Assistance Program, PAMI is contributing to an initiative to apply technology to advance the Saskatchewan and Manitoba agricultural manufacturing sectors. The purpose of the initiative is to build SME awareness of the technological opportunities to accelerate product commercialization, reduce risk, increase profitability, attract investment, and contribute to the economy through wealth generation and job creation.

Over the past year, 74 Saskatchewan and Manitoba companies were contacted and given presentations on innovation agencies, including PAMI. As a result, R & D projects valued at $400,000 were initiated at PAMI with an estimated economic impact of $6.8 million and 40 jobs.

The following were service areas identified by SMEs as priority needs:

- new/foreign technology assessments
- product development, design, and testing
- modeling/simulation of mechanical systems
- technical library services
- advisory services on the technical aspects of regulations
- plant design and process optimization

WESTEST

Innovative Testing for Industry

Board of Directors

Jerry Engel (Chair)
Carol Vibert (Vice Chair)
Kevin L. Ehrecke
Ray Malinowski
Calvin Mazurenko
Rhonda Orr
Pamela Schwann
James Umlah
Don Watt

WESTEST is an industrial testing and engineering facility with two decades of proven, industry-respected service delivering advanced product engineering and development. Its offerings are integrated with a wide array of physical testing capabilities to equipment and vehicle manufacturers across North America. WESTEST evaluates components, full vehicles, and machines for a broad range of equipment and manufacturing industries.

Two clients who have been using the Centre extensively are New Flyer Industries Inc. and Motor Coach Industries. As a result of WESTEST's services, they have been successful in performing powertrain evaluations as a direct result of the thermal stability benefits offered by the controlled conditions of the test lab. The value of these third-party contracts for clients is that they receive an objective evaluation of the performance of their vehicles. WESTEST staff and clients then work together to make enhancements.

Project Highlights

In 2011-12, WESTEST conducted several projects on behalf of clients. **All work for clients is confidential** and cannot be described in detail. In summary, WESTEST's ability to physically evaluate designs under simulated conditions that accelerate normal operation, allows clients to quickly and effectively develop durable products with little, to no, uncertainty regarding their performance in service. This provides them with a substantial competitive advantage through rapid rollout of new products.

Private service provision included:

- auger gearbox testing
- driveline test
- bus tunnel frame durability test
- seat belt pull tests
- driver's seat tests
- polyethylene fuel tank durability test
- bus axle mount durability test
- structural frame durability test
- loader durability test
- rollover protective structure (ROPS) design, build, and test
- falling objects protective structure (FOPS) tests

Outreach

Branding

With an evolving organization and a strategic focus on improving visibility and communications, PAMI undertook a rebranding initiative in late 2011. The result is a modernized visual identity that celebrates the organization's historical significance and refreshes the PAMI brand to reflect opportunities of the future. Furthermore, the new brand complements those created for WBDC and WESTEST, while respecting their unique identities.

PAMI will be rolling out the new visual identity starting with a website to be launched in May 2012. Over time, all marketing communications produced by PAMI will incorporate the brand.

PAMI's web address is www.pami.ca. There one can find an online library of PAMI reports, both past and newly-released.

Combine Clinic

The rebirth of the "Combine Clinic," developed in concert with the Canola Council and delivered to over 350 attendees at the 2009 Crop Production show, was considered a strong indicator that there is a pent-up demand for practical farm machinery information. In 2011, PAMI presented at six similar events in Westlock, AB, Brandon, MB, and Prince Albert and Kindersley, SK.

Combining is the activity in crop production that drives the ability to earn revenue. By gaining an understanding of the value of loss and how to prevent it, producers can improve their performance and make more informed equipment purchases in the future.

This year, the Combine Clinics became more interactive, being conducted also as webinars, enabling participants to interact with the presenters.

http://pami.ca/2012/06/combine-seed-loss-guide/

Our Projects

Manitoba Grant Projects

Riverbend AD Long-term Evaluation

Small Wind Demonstration

Manure Treatment Evaluation

SME Marketing Initiative

Biomass Energy Crop Densification Evaluation

Farm Machinery Rental Guide

Willow Biomass Densification Evaluation

In-vessel Composting of Lagoon Solid Fractions

Radio Frequency ID Tags

Repeated Application of Manure and Biogas

Farm Machinery Safety Standards

Long-term Storage Canola

Manure Applications and GHG Study

Winter Wheat Demo Plots

New Canadian Farm Machinery Safety Standards

SME Marketing

Safer Auger Intake Guard

Modify Plot Combine

Grain Moisture Measurements System

Solid Manure Land Application

Consulting and Review Services

Applied Bioenergy Centre

SSD Pilot Research

Cubing Demo

SSD Upgrade

Saskatchewan Biomass Logistics Road Map

Optimization of SSD

Nutrient Export

Strategic Research Program

Time of Calving

DDGS - Calves

Cost of Production Study

Backgrounding Calves with Extended Fall Grazing

Bloat-safe Alfalfa

Re-establishing Alfalfa into Existing Grass Stands

Utilization of Stockpiled Forages

Short-Rotation Forage Legumes for Reducing N Fertilizer

Pasture Rejuvenation Techniques

No-Till Seeding a New Fall Rye for Pasture Rejuvenation

Cost-effective Heifer Development Systems

Branded Feed Products for Cattle from Byproducts

Zero-Till Opener Evaluation for Pasture Rejuvenation

Validation of Commercially-viable DNA

Video Clips for Presentation of Beef R & D

Grazing Comparison of New Grazing Corn Hybrids for Saskatchewan Producers

Grain vs. Grass

Extended Corn Grazing

Tagging and Data Collection

Our People

A Multi-faceted Research and Development Organization

PAMI is a multi-faceted research and development organization with a unique mix of capabilities. Its primary and historic agricultural focus gives it unparalleled depth and knowledge of agricultural processes and equipment. It intimately knows, and can work with, any type of agricultural equipment used at any stage of the agricultural cycle from soil preparation and seeding, through harvesting and processing.

PAMI's agrarian capabilities have extended beyond equipment to the crops that the equipment is designed to work with. PAMI's teams of engineers and agrologists work together to identify the feasibility of developing and marketing new crops for new or alternative uses including bioenergy, bioproducts, and nutraceuticals.

The Unique Benefits Of A Dual Focus

PAMI's engineering capabilities have also extended beyond its primary focus in the agricultural sector to a secondary focus related to industrial mechanical equipment. The knowledge learned through its agricultural expertise has proven to be transferrable to other industrial sectors.

PAMI has become uniquely placed in its business sector with its dual focus in both the agricultural and industrial mechanics sectors.

PAMI's many years of testing experience provides practical knowledge that goes well beyond engineering theory, to the core of how machines and processes perform and fail in the real world. This leads to cost-effective durable solutions and designs that save clients time and money in their research, development, equipment, and process improvements.

Confidentiality to Uphold Competitive Advantage

Many private and public clients use PAMI's services to make product improvements to create a competitive advantage. For that reason, PAMI carries out its work with strict confidentiality.

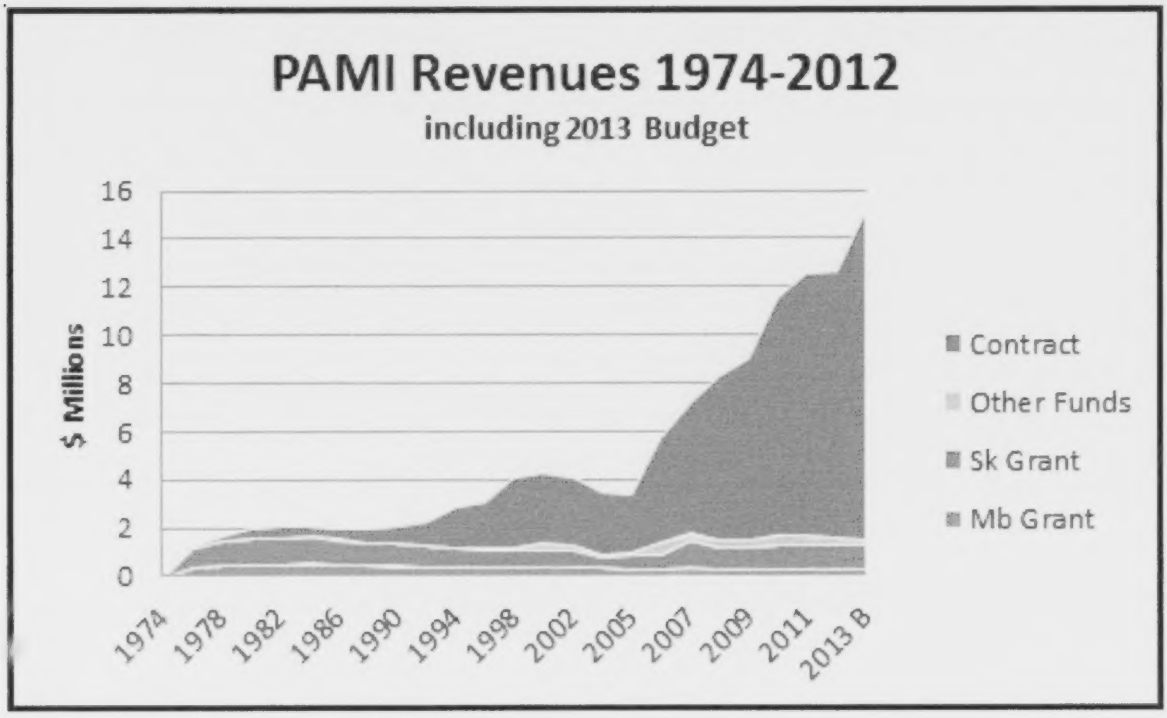
Financial Highlights

The year ended March 31, 2012 was a successful year for PAMI from a financial perspective. Total revenues from operations were $12,607,842, a small increase compared to $12,450,888 for the previous year. This was lower than expected as significant contracts were delayed to the next fiscal year. For next year, our confirmed fee-for-service contracts are already at $10,790,000 ($6,237,000 in 2012), with another $7,684,000 in expected work from proposals outstanding ($1,964,000 in 2012).

Operating expenses for the year ended March 31, 2012 totaled $12,418,883, compared to $11,997,021 in 2011. The cost increase was comprised of regular cost escalations and two singular projects relating to rebranding and a compensation review.

Surplus before capital grants for the year was $188,959, compared to $453,867 for the year ended March 31, 2011. The amortization charge on plant, equipment, and herd for the year was $431,384, compared to $411,004 in 2011. PAMI received $83,573 government funding for capital in 2012, compared to a grant of $63,141 for funding capital in 2011.

Capital expenses for the 2012 year were $650,183, compared to $602,346 in 2011. PAMI continued to focus its capital expenditures on growth initiatives, including expansion and upgrades to facility space and supporting equipment.



Financial Statements

Prairie Agricultural Machinery Institute
Financial statements for the year ended March 31, 2012

Management Report

To the Members of the Legislative Assembly of Saskatchewan:

Year Ended March 31, 2012

The accompanying financial statements are the responsibility of the management of the Prairie Agricultural Machinery Institute. They have been prepared in accordance with Canadian public sector accounting standards, using management's best estimates and judgments, where appropriate.

Management is responsible for the reliability and integrity of the financial statements, the notes to the financial statements, and other financial information contained in this report. Management is also responsible for maintaining a system of internal controls, policies and procedures designed to provide reasonable assurance that assets are safeguarded and the accounting systems provide accurate and reliable financial information.

The Board of Directors is responsible for ensuring that management's responsibilities are properly discharged, to review and approve the financial statements. The Provincial Auditor of Saskatchewan has audited PAMI's financial statements in accordance with Canadian generally accepted auditing standards and her report follows.

David Gullacher
President and CEO

Joanne Forer
V.P. Finance and Administration

Independent Auditor's Report

To: The Members of the Legislative Assembly of Saskatchewan

I have audited the accompanying financial statements of Prairie Agricultural Machinery Institute, which comprise the statement of financial position as at March 31, 2012, March 31, 2011, and April 1, 2010; and the statement of operations and accumulated surplus, statement of change in net financial assets, and statement of cash flows for the years ended March 31, 2012 and March 31, 2011, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards for Treasury Board's approval, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of Prairie Agricultural Machinery Institute as at March 31, 2012, March 31, 2011, and April 1, 2010, and the results of its operation, changes in net financial assets, and its cash flows for the years ended March 31, 2012 and March 31, 2011 in accordance with Canadian public sector accounting standards.

Bonnie Lysyk

Regina, Saskatchewan
July 19, 2012

Bonnie Lysyk, MBA, CA
Provincial Auditor

Statement 1

Statement of Financial Position as at

	March 31 2012	March 31 2011	April 1 2010
Financial Assets			
Cash	$ 23,065	$ 112,533	$ 11,243
Due from General Revenue Fund (Note 3)	271,945	1,098,823	353,986
Restricted cash - Due from General Revenue Fund (Notes 3 & 4)	2,308,422	2,635,725	2,819,952
Accounts receivable (Note 5)	3,285,282	2,656,285	3,057,956
	5,888,714	**6,503,366**	**6,243,137**
Liabilities			
Bank indebtedness	-	-	248,660
Accounts payable and accrued liabilities (Note 6)	1,100,289	1,372,094	1,245,662
Unearned revenue	672,317	639,686	422,792
Deferred grant revenue	-	-	39,153
Deferred grant revenue - ABC (Note 7)	2,308,422	2,635,725	2,775,799
	4,081,028	**4,647,505**	**4,732,066**
Net Financial Assets (Statement 3)	**1,807,686**	**1,855,861**	**1,511,071**
Non-financial Assets			
Tangible capital assets (Schedule 1)	4,371,411	4,110,863	3,864,532
Prepaid expenses	240,585	245,494	177,455
Breeding herd (Note 8)	250,373	245,515	302,180
Inventory (Note 9)	216,276	156,066	241,553
	5,078,645	**4,757,938**	**4,585,720**
Accumulated Surplus (Statement 2)	**$ 6,886,331**	**$ 6,613,799**	**$ 6,096,791**

Contractual Obligations (Note 10)

(See accompanying notes to financial statements)

Statement 2

Statement of Operations and Accumulated Suprlus as at March 31

	Budget (Note 14)	2012	2011 (Restated)
Revenue			
Provincial Transfers:			
Government of Saskatchewan			
Ministry of Agriculture			
- operating	$ 995,000	$ 995,000	$ 995,000
- grant recoverable expenditures	-	-	1,076
Horned Cattle Fund	-	-	6,853
Government of Manitoba			
Department of Agriculture, Food and Rural Initiatives			
- operating	260,000	259,682	259,682
	1,255,000	1,254,682	1,262,611
Fee for service	11,598,189	10,977,274	10,772,463
Interest income	4,500	9,903	15,208
Other income	318,500	365,983	400,606
Total revenues	13,176,189	12,607,842	12,450,888
Expenses			
Personnel	6,767,166	6,504,915	6,116,308
Fee for service direct costs	3,585,615	3,520,418	3,665,599
Administration	1,136,734	1,085,337	956,251
Operating	817,900	744,555	725,250
Amortization	358,300	431,384	411,004
Lease - land and equipment	86,700	62,863	70,947
Bad debt expense	55,000	26,397	12,903
Exchange loss	-	18,848	6,883
Loss on disposal of assets	-	19,309	25,566
Honoraria	6,800	4,675	6,273
Interest expense	-	182	37
Total expenses	12,814,215	12,418,883	11,997,021
Surplus before capital grants	361,974	188,959	453,867
Capital grants from Ministry of Agriculture	228,500	83,573	63,141
Surplus for the year (Schedule 2)	$ 590,474	272,532	517,008
Accumulated Surplus, beginning of Year (Schedule 3)		6,613,799	6,096,791
Accumulated Surplus, End of Year (Statement 1)		$ 6,886,331	$ 6,613,799

(See accompanying notes to financial statements)

Statement 3

Statement of Change in Net Financial Assets
Year Ended March 31

	2012	2011
Surplus	**$ 272,532**	**$ 517,008**
(Acquisition) of tangible capital assets	(650,183)	(602,346)
(Acquisition and transfer) of breeding herd	(96,522)	(52,150)
Amortization of tangible capital assets	368,791	349,625
Amortization of breeding herd	62,593	61,379
Proceeds of disposal of tangible capital assets	6,203	12,389
Proceeds of disposal of breeding herd	26,038	27,060
Net loss (gain) on the disposal of tangible capital assets	8,898	(5,999)
Net loss on write-offs of tangible capital assets	5,744	-
Net loss on the disposal of breeding herd	3,032	20,376
Net acquisition of tangible capital assets and breeding herd	(265,406)	(189,666)
Use (acquisition) of prepaid expense	4,909	(68,039)
(Acquisiton) consumption of inventory	(60,210)	85,487
Net (acquisition) consumption of other non-financial assets	(55,301)	17,448
(Decrease) increase in Net Financial Assets	(48,175)	344,790
Net Financial Assets - Beginning of Year	1,855,861	1,511,071
Net Financial Assets - End of Year	**$ 1,807,686**	**$ 1,855,861**

(See accompanying notes to financial statements)

Statement 4

Statement of Cash Flows
Year Ended March 31

	2012	2011
Cash flows from (used in) operating activities:		
Receipts from customers and others	$ 10,447,970	$ 11,631,262
Transfers from Government of Saskatchewan	1,022,159	1,023,864
Transfers from Government of Manitoba	259,682	259,682
Payments to suppliers and employees	(12,268,717)	(11,429,437)
Interest paid	(182)	(37)
Interest received	9,903	15,208
	(529,185)	1,500,542
Cash flows from (used in) capital activities:		
Purchase of tangible capital assets	(650,183)	(602,346)
Purchase and transfer of breeding herd	(96,522)	(52,150)
Proceeds from sale tangible capital assets and breeding herd	32,241	39,449
	(714,464)	(615,047)
Cash flows from financing activities:		
Receipt of capital grants from Government of Saskatchewan	-	25,065
(Decrease) increase in cash position	(1,243,649)	910,560
Cash position, beginning of year	3,847,081	2,936,521
Cash position, end of year	$ 2,603,432	$ 3,847,081
Comprised of:		
Cash	$ 23,065	$ 112,533
Due from General Revenue Fund	271,945	1,098,823
Restricted Cash - due from General Revenue Fund	2,308,422	2,635,725
	$ 2,603,432	$ 3,847,081

(See accompanying notes to financial statements)

Notes to the Financial Statements
March 31, 2012

1. Status of Institute

The Prairie Agricultural Machinery Institute (Institute) is a body corporate operating under *The Prairie Agricultural Machinery Institute Act, 1999*. Its primary purpose is to perform tests and conduct research on machinery, equipment and technologies used in the agriculture, food and other industries. The Institute's testing facilities are located in Humboldt and Lanigan, Saskatchewan and Portage la Prairie, Manitoba.

On wind-up, any net assets will be divided between the Governments of Saskatchewan and Manitoba in proportion to their respective share in the Institute's assets equivalent to the percentage of funding provided to date by each province.

The Institute's objective when managing its capital structure, which consists of net assets, is to ensure adequate funding exists to support its operations and growth strategies. Capital is managed through grant funding and an available line of credit. The Institute does not have any long-term debt.

The Institute relies on funding from the Governments of Saskatchewan and Manitoba and on one customer for continued fee for service revenue. This customer accounts for 62% (2011 - 64%) of its fee for service revenue and 69% (2011 - 65%) of accounts receivable.

2. Significant accounting policies

Pursuant to standards established by the Canadian public sector accounting standards (PSAB), the Institute is classified as an 'other government organization'. Effective for the fiscal year ended March 31, 2012 these financial statements are prepared in accordance with Canadian public sector accounting standards applicable for the public sector. The Institute has elected to use the tangible capital asset impairment exemption. As first-time adopters, the Institute does not need to comply with the tangible capital assets section PS 3150 requirements for write-downs of tangible capital assets that were incurred prior to the date of transition to public sector accounting standards.

The significant accounting policies are as follows:

a) Revenue recognition

The Institute's operations are funded by the Government of Saskatchewan (Saskatchewan) and the Government of Manitoba (Manitoba) according to an agreement between the two provinces. Under Order in Council 1800/79, the Institute is not required to return the unused portion of the provincial transfers. The Institute recognizes provincial transfers when the transfer is authorized and eligibility criteria have been met by the Institute.

Transfers that meet the definition of a liability are deferred including interest earned on the deferred amount.

The Institute recognizes fee for service revenue when the related services are provided. It recognizes fee for service on contracts using the percentage of completion method. It records monies received prior to providing services as unearned revenue.

b) Cash

Cash consists of cash on hand, balances with financial institutions, and due from General Revenue Funds.

c) Non-financial assets

Tangible capital assets and other non-financial assets are accounted for as assets by the Institute because they can be used to provide services in future periods. These assets do not normally provide resources to discharge the liabilities of the Institute unless they are sold.

Tangible capital assets are recorded at cost less accumulated amortization. Self-constructed assets are recorded at cost, including labour and materials. Amortization is recorded using methods and rates intended to amortize the cost of assets over their useful life.

	Method	Rate
Buildings	declining balance	5%
Equipment, furniture, and vehicles	declining balance	10%
Computer equipment	declining balance	30%
Leasehold improvements	straight line	10%
Computer software	straight line	33%

The breeding herd is recorded at cost less accumulated amortization. This asset is being amortized at 20% declining balance.

Inventory of livestock and feed is recorded at the lower of cost and net realizable value. Livestock inventory cost is determined using the weighted average method and feed inventory cost is determined using the first-in, first-out method. Net realizable value is the estimated selling price in the ordinary course of business.

d) Measurement uncertainty

The preparation of financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenue and expenditures during the period.

Accounts receivable are stated after evaluation as to their collectability and an appropriate allowance for doubtful accounts is provided where considered necessary. Accounts receivable includes fee for service revenue on contracts based on an estimate of the percentage of completion at the time of measurement. The measurement of materials and supplies are based on estimates of volume and quality. Amortization is based on the estimated useful lives of tangible capital assets. These estimates and assumptions are reviewed periodically and, as adjustments become necessary they are reported in earnings in the periods in which they become known.

The degree of uncertainty associated with the measurement of estimated amounts recognized in the financial statements is not material.

e) Basis of segmentation

The Institute has adopted the Canadian public sector accounting standards requiring financial information to be provided on a segmented basis. The Institute has been segmented by accountability center. Revenues that are directly related to the costs of the segment have been attributed to each segment.

The segments are as follows:

- **Corporate Services** provides for the administration of the Institute.
- **Saskatchewan Operations** is an applied research, design, development and testing segment. It serves the agricultural, industrial, transportation, military and other market sectors.
- **Manitoba Operations** is an applied research, design, development and testing segment. It serves the agricultural, industrial, transportation, military and other market sectors.
- **Western Beef Development Centre (WBDC)** applies and transfers beef research to improve profitability of the cow/calf sector of the beef industry.

3. Due from General Revenue Fund

Due from General Revenue Fund is money held in a bank account included in the Government of Saskatchewan's Consolidated Offset Bank Concentration arrangement. The Institute receives interest on a quarterly basis from the General Revenue Fund calculated using the Government of Saskatchewan's thirty-day borrowing rate and the Institute's average daily bank account balance. For 2012, the average interest rate was 1.05% (2011 - 0.80%).

4. Restricted cash - Due from General Revenue Fund

	2012	2011
Balance, beginning of year	$2,635,725	$2,819,952
Restricted funds received	-	25,000
Interest revenue	27,159	22,076
Restricted funds expended	(354,462)	(231,303)
Balance, end of year	$2,308,422	$2,635,725

Restricted cash is government grant funds held for designated expenditures to be incurred in future years for the applied BioEnergy Centre (ABC). An offsetting liability has been established in deferred grant revenue - ABC (Note 7).

5. Accounts receivable

	2012	2011
Trade accounts receivable	$3,270,626	$2,627,707
Other	36,251	50,173
Allowance for doubtful accounts	(21,595)	(21,595)
Accounts receivable	$3,285,282	$2,656,285

6. Accounts payable and accrued liabilities

	2012	2011
Trade accounts payable	$525,968	$633,786
Wages and other personnel costs	422,001	639,480
Other	152,320	98,828
Accounts payable and accrued liabilities	$1,100,289	$1,372,094

7. Deferred grant revenue – Applied BioEnergy Centre (ABC)

In March 2007, the Institute and the Ministry of Agriculture (Ministry) signed a Memorandum of Understanding (MOU) under which the Institute received $3.3 million to create a research program in bio-energy and processing. The Institute received the funds in April 2007. Pursuant to the MOU, the Institute and the Ministry negotiated an agreement which established guidelines on how the $3.3 million would be spent. During 2012, the Institute received approval from the Ministry to spend $354,462 (2011-166,365).

	2012	2011
Balance, beginning of year	$2,635,725	$2,775,799
Earned interest	27,159	22,011
Revenue recognized -Fee for service	(270,889)	(162,085)
-Capital grants	(83,573)	-
Balance, end of year	$2,308,422	$2,635,725

8. Breeding herd

Cost	2012	2011
Opening balance	$510,560	$545,834
Additions and transfers	96,522	52,150
Disposals	(61,059)	(87,424)
Closing Balance	$546,023	$510,560
Accumulated Amortization		
Opening balance	$265,045	$243,654
Amortization	62,593	61,379
Disposals	(31,988)	(39,988)
Closing Balance	295,650	265,045
Net Book Value	$250,373	$245,515

The breeding herd consists of cows that are used for beef research in the operations of the Western Beef Development Centre.

9. Inventory

	2012	2011
Livestock	$152,751	$105,094
Feed	63,525	50,972
Total	$216,276	$156,066

Inventory recovered in 2012 was $(58,928) and expensed in 2011 was $112,921.

10. Contractual obligations

The Institute has committed to provide future services to several research and development projects. At March 31, 2012, the value of these services totals $250,563 (2011 - $233,059).

Lease terms on vehicles, equipment and land range from 3 to 7 years. In 2012, these lease costs totalled $69,013 (2011 - $77,609). The Institute is required to make the following minimum lease payments on these leases:

2013	$19,232
2014	4,080
2015	2,899
2016	2,899
2017	477

Under contract with Western Canada Testing Inc. (WESTEST), the Institute manages and operates WESTEST under the direction of WESTEST's Board of Directors for a certain percentage of the service fees from WESTEST clients. During the year, the Institute earned fee for service revenue of $203,634 (2011 - $263,234) from WESTEST. At year-end, accounts receivable includes $76,591 (2011 - $180,659) due from WESTEST.

11. Foreign currency risk

The Institute enters into transactions denominated in United States currency for which the related revenues, expenses, accounts receivable and accounts payable balances are subject to exchange rate fluctuations. As at March 31, 2012 the following items are denominated in United States currency ($ CAD converted at $1 USD - .9975 CAD (2011 - 0.9696)):

	2012	2011
Cash	$(27,096)	$ 10,464
Accounts receivable	-	131,112
Accounts payable	53,059	15,452

12. Related party transactions

These financial statements include transactions with related parties. The Institute is related to all Saskatchewan Crown agencies such as ministries, corporations, boards and commissions under the common control of the Government of Saskatchewan. The Institute is also related to all Manitoba Crown agencies because of the Government of Manitoba's participation in the operations of the Institute. In addition, the Institute is related to non-Crown enterprises that the Government of Saskatchewan or the Government of Manitoba jointly controls or significantly influences.

Routine operating transactions with related parties are recorded at the agreed upon rates and are settled on normal trade terms. Those transactions and amounts outstanding at year-end are as follows:

	2012	2011
Financial statements category		
Fee for service revenue	$1,915,500	$1,538,190
Other operating expenses	838,804	642,528
Accounts receivable	260,661	129,816
Accounts payable and accrued liabilities	104,302	59,038
Unearned revenue	582,581	619,389

The Institute has leased land from the University of Saskatchewan for a nominal amount until October 31, 2013. In addition, the Institute pays Saskatchewan and Manitoba provincial sales tax on its taxable purchases made in those provinces. Taxes paid are recorded as part of the cost of those purchases.

Other transactions with related parties and amounts due to/from them are described separately in the financial statements and the notes thereto.

13. Pensions

The Institute's employees participate in the Saskatchewan Public Employees Pension Plan, a multi-employer defined contribution pension plan. The Institute's responsibility is limited to paying the required employer contributions for its employees. Salaries and benefits include contributions of $300,697 (2011 - $278,776).

14. Budget

The budget for 2011/2012 was approved by the Board on April 5, 2011. The budget figures are presented for comparison purposes.

15. Adoption of new accounting standards

Effective April 1, 2011, the Institute retrospectively adopted the Canadian public sector accounting standards. Significant changes were required with the early adoption of the PSAB standards for government transfers. The government transfers section, PS 3410, establishes standards on how to account for and report government grants from a recipient entity perspective. Transfers including capital grants are recognized as revenue when the transfers without stipulations are authorized and the eligibility criteria are met. Transfers with stipulations are assessed to determine if they meet the definition of liability, in which case revenue is recorded as the liability is settled.

These standards were adopted with retrospective restatement, and therefore the 2011 comparative figures have been restated. The opening statement of financial position in accordance with Canadian public sector accounting standards as of April 1, 2010 has been disclosed for comparative purposes. The adjustment to reflect the new accounting policy for government transfers has been made to 2011's opening accumulated surplus. Refer to Schedule 3.

16. Future application of accounting standards

As a government organization, the Institute will apply, to fiscal years beginning on or after April 1, 2012, the following sections from the PSAB standards:

- Foreign currency translation-Section PS 2601
  This section establishes standards on how to account for and report transactions that are denominated in a foreign currency.
- Financial instruments-Section PS 3450
  This section establishes standards on how to account for and report all types of financial instruments.
- Financial statement presentation-Section PS 1201
  Establishing general reporting principles and standards for the disclosure of information, this section applies in the same period that Sections PS 2601 and PS 3450 are adopted.

17. Contingency

At year-end two actions were outstanding against the Institute, of which the ultimate outcomes are not yet determinable and accordingly, no liability has been recorded in the financial statements.

18. Comparative figures

Prior year comparative figures have been restated to conform to the current year's presentation.

Schedule of Tangible Capital Assets as at March 31

	Land and Improvements	Buildings	Equipment & Furniture	Vehicles	Computer Equipment	Leasehold Improvements	Computer Software	2012 Total	2011 Total
Asset Cost									
Opening Balance	$ 279,841	$4,866,382	$3,051,361	$ 507,218	$ 561,426	$ 124,164	$ 37,219	$9,427,611	$8,848,446
Additions	-	343,401	252,779	-	32,506	-	21,497	650,183	602,346
Disposals	-	-	(45,821)	-	(2,835)	-	-	(48,656)	(23,181)
Write-downs	-	-	(270,668)	-	(10,110)	-	-	(280,778)	-
Closing Balance	279,841	5,209,783	2,987,651	507,218	580,987	124,164	58,716	9,748,360	9,427,611
Accumulated Amortization									
Opening Balance	-	2,715,026	1,787,694	322,036	443,383	31,734	16,875	5,316,748	4,983,914
Amortization	-	124,738	148,448	18,518	45,098	12,417	19,572	368,791	349,625
Disposals	-	-	(30,942)	-	(2,614)	-	-	(33,556)	(16,791)
Write-downs	-	-	(264,924)	-	(10,110)	-	-	(275,034)	-
Closing Balance	-	2,839,764	1,640,276	340,554	475,757	44,151	36,447	5,376,949	5,316,748
Net Book Value	$ 279,841	$2,370,019	$1,347,375	$ 166,664	$ 105,230	$ 80,013	$ 22,269	$4,371,411	$4,110,863

April 1, 2011 the Institute changed the threshold from $1,000 to $5,000 for capitalizing tangible capital assets. The change has not been applied retroactively.

Schedule 2

Schedule of Segment Disclosure for the Year Ended March 31

	Corporate Services		Saskatchewan		Manitoba		WBDC		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Revenue										
Provincial Transfers:										
Government of Saskatchewan										
Ministry of Agriculture										
- operating	$320,000	$260,000	$310,000	$370,000	$ -	$ -	$365,000	$365,000	$995,000	$995,000
- grant recoverable expenditures	-	-	-	-	-	-	-	1,076	-	1,076
Horned Cattle Fund	-	-	-	-	-	-	-	6,853	-	6,853
Government of Manitoba										
Department of Agriculture, Food and Rural Initiatives										
- operating	30,000	30,000	-	-	229,682	229,682	-	-	259,682	259,682
	350,000	290,000	310,000	370,000	229,682	229,682	365,000	372,929	1,254,682	1,262,611
Fee for service	-	-	8,625,440	8,720,597	1,525,285	1,279,509	826,549	772,357	10,977,274	10,772,463
Interest income	9,856	6,370	47	8,444	-	394	-	-	9,903	15,208
Other income	1,537	19,566	166,142	145,345	22,877	26,564	175,427	209,131	365,983	400,606
Total Revenues	361,393	315,936	9,101,629	9,244,386	1,777,844	1,536,149	1,366,976	1,354,417	12,607,842	12,450,888
Expenses										
Personnel	692,154	613,468	4,184,226	4,048,393	978,803	854,589	649,732	599,858	6,504,915	6,116,308
Fee for service direct costs	-	-	2,691,126	2,969,011	408,070	375,446	421,222	321,142	3,520,418	3,665,599
Administration fee (recovery)	(548,863)	(539,702)	431,272	437,104	76,264	63,980	41,327	38,618	-	-
Administration	222,767	139,183	576,407	499,111	227,359	197,140	58,804	120,817	1,085,337	956,251
Operating	45,087	35,185	445,119	354,496	98,486	77,442	155,863	258,127	744,555	725,250
Amortization	5,000	5,000	277,013	270,506	38,324	48,220	111,047	87,278	431,384	411,004
Lease - land and equipment	1,437	2,647	46,334	50,709	13,030	13,965	2,062	3,626	62,863	70,947
Bad debt	-	-	26,397	-	-	12,903	-	-	26,397	12,903
Exchange loss	-	-	15,492	5,237	815	1,646	2,541	-	18,848	6,883
Loss on disposal of assets	-	-	8,897	3,830	5,744	-	4,668	21,736	19,309	25,566
Honoraria	1,950	2,340	-	-	-	-	2,725	3,933	4,675	6,273
Interest expense	182	37	-	-	-	-	-	-	182	37
Total expenses	419,714	258,158	8,702,283	8,638,397	1,846,895	1,645,331	1,449,991	1,455,135	12,418,883	11,997,021
Surplus before capital grants	(58,321)	57,778	399,346	605,989	(69,051)	(109,182)	(83,015)	(100,718)	188,959	453,867
Capital grants			83,573					63,141	83,573	63,141
Surplus for the year	$(58,321)	$57,778	$482,919	$605,989	$(69,051)	$(109,182)	$(83,015)	$(37,577)	$272,532	$517,008

Schedule of Financial Statement Adjustments As at March 31, 2012

Effective for the fiscal year ended March 31, 2012 these financial statements are prepared in accordance with Canadian public sector accounting standards applicable for the public sector.

Effect of Change on April 1, 2010 Statement of Financial Position

Accumulated Surplus (Previously reported as "Net Assets")	$ 3,763,247
Add: capital grants no longer deferred	2,250,769
Add: capital grants ABC no longer deferred	82,775
Restated April 1, 2010 Accumulated Surplus	**$ 6,096,791**

Effect of Change on 2011 Statement of Operations

Surplus for the Year (Previously reported as "Excess of revenues over expenses")	$ 704,423
Add: capital grants received	63,141
Less: capital grants recognized in year	(246,276)
Less: capital grants from ABC recognized in year	(4,280)
Restated 2011 Surplus for the Year	**$ 517,008**

PAMI Corporate Services
Box 1150, 2215 8th Avenue
Humboldt, SK S0K 2A0
P: (306) 682-2555, 1-800-567-PAMI
F: (306) 682-5080
pami@sasktel.net

PAMI Saskatchewan
P: (306) 682-5033
F: (306) 682-5080
humboldt@pami.ca

PAMI Manitoba
Box 1060, 390 River Road
Portage la Prairie
P: (204) 239-5445
F: (204) 239-7124
portage@pami.ca

WBDC Main Office
Box 1150, 2215 8th Avenue
Humboldt, SK S0K 2A0
P: (306) 682-3139
F: (306) 682-5080
info.wbdc@pami.ca

WBDC Research Ranch
Box 700
Lanigan, SK S0K 2M0
P: (306) 365-3366
F: (306) 365-3374
humboldt@pami.ca

www.pami.ca
www.wbdc.ca
www.westest.ca